Chapter 1 Review

Vocabulary/Notation
Point, line, plane, collinear, coplanar, segment, bisector, midpoint, angle, etc…

If 2 lines intersect, then they intersect in a … point
If 2 planes intersect, then they intersect in a … line

$\overline{AB} \cong \overline{CD}$ ✓
$AB = CD$ ✓
$\overline{AB} \not\cong \overline{CD}$ X

Sep 26-7:15 AM

Distance formula-perimeter problems

$d = \sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$

Midpoint formula

$M\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}\right)$

Find midpt
Find endpt

$\frac{8+x}{2} = 6$
$8+x=12$

3b.
$L(8,-1)$ $M(6,3)$
$\frac{-1+y}{2}=0$ $N(x,y)$
$-1+y=0$ $(4,1)$

Sep 26-7:17 AM

Classify angles
Acute, right, obtuse, straight

Naming angles

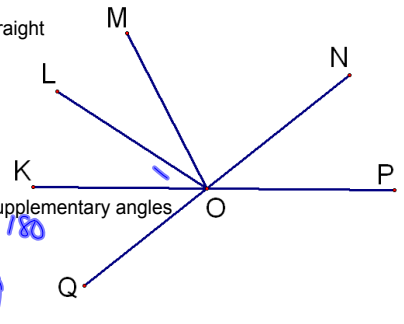
Adjacent angles

Vertical angles

Complementary and supplementary angles
90 180

Linear pair

Perpendicular lines ⊥



Sep 26-7:17 AM

Polygons (prefixes)
Convex or concave
Regular

Sep 26-7:17 AM

"Algebra Problems"
Ask yourself these questions
Are the expressions equal?
Is one half of the other?
Do they total 90°?
Do they total 180°?
If 3 parts are given, do two total the 3rd?

Sep 26-7:18 AM

Show book website.

http://www.glencoe.com/sec/math/geometry/geo/geo_04/

Sep 26-7:18 AM

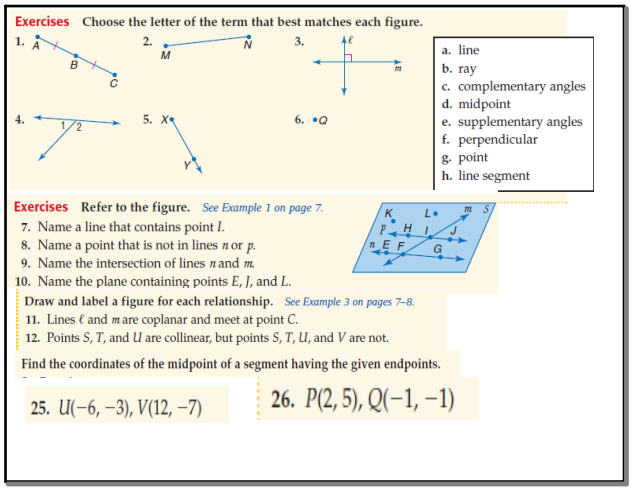
Review Problems.
p53-56 #s 1-12, 25, 26, 28-30, 35-37, 39, 40, 42-44

p57 #s 1-21

Answers will be posted on the wiki!

On LL.

Sep 18-10:53 AM



Exercises Choose the letter of the term that best matches each figure.

1. A, B, C
2. M, N
3. ℓ, m
4. 1, 2
5. X, Y
6. Q

a. line
b. ray
c. complementary angles
d. midpoint
e. supplementary angles
f. perpendicular
g. point
h. line segment

Exercises Refer to the figure. *See Example 1 on page 7.*

K, L, m, S, p, H, I, J, n, E, F, G

7. Name a line that contains point *I*.
8. Name a point that is not in lines *n* or *p*.
9. Name the intersection of lines *n* and *m*.
10. Name the plane containing points *E*, *J*, and *L*.

Draw and label a figure for each relationship. *See Example 3 on pages 7–8.*

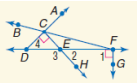
11. Lines ℓ and *m* are coplanar and meet at point *C*.
12. Points *S*, *T*, and *U* are collinear, but points *S*, *T*, *U*, and *V* are not.

Find the coordinates of the midpoint of a segment having the given endpoints.

25. $U(-6, -3), V(12, -7)$
26. $P(2, 5), Q(-1, -1)$

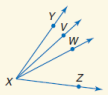
Sep 18-10:55 AM

Exercises For Exercises 28–30, refer to the figure at the right. *See Example 1 on page 30.*



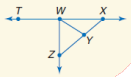
28. Name the vertex of $\angle 4$.
29. Name the sides of $\angle 1$.
30. Write another name for $\angle 3$.

In the figure, *XW* bisects $\angle YXZ$ and *XV* bisects $\angle YXW$. *See Example 3 on page 32.*



35. If $m\angle YXV = 3x$ and $m\angle VXW = 2x + 6$, find $m\angle YXW$.
36. If $m\angle YXW = 12x - 10$ and $m\angle WXZ = 8(x + 1)$, find $m\angle YXZ$.
37. If $m\angle YXZ = 9x + 17$ and $m\angle WXZ = 7x - 9$, find $m\angle YXW$.

Exercises For Exercises 38–41, use the figure at the right. *See Examples 1 and 3 on pages 38 and 40.*



39. Name a linear pair whose angles have vertex *W*.
40. If $m\angle TWZ = 2c + 36$, find *c* so that $\overline{TW} \perp \overline{WZ}$.

Exercises Name each polygon by its number of sides. Then classify it as *convex* or *concave* and *regular* or *irregular*. *See Example 1 on page 46.*

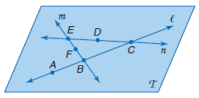
42. 
43. 
44. 

Sep 18-10:57 AM

Determine whether each statement is *true* or *false*.

1. A plane contains an infinite number of lines.
2. If two angles are congruent, then their measures are equal.
3. The sum of two complementary angles is 180.
4. Two angles that form a linear pair are supplementary.

Skills and Applications



For Exercises 5–7, refer to the figure at the right.

5. Name the line that contains points *B* and *F*.
6. Name a point not contained in lines ℓ or *m*.
7. Name the intersection of lines ℓ and *n*.

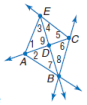
Find the value of the variable and *VW* if *V* is between *U* and *W*.

8. $UV = 2$, $VW = 3x$, $UW = 29$
9. $UV = r$, $VW = 6r$, $UW = 42$
10. $UV = 4p - 3$, $VW = 5p$, $UW = 15$
11. $UV = 3c + 29$, $VW = -2c - 4$, $UW = -4c$

Find the distance between each pair of points.

12. $G(0, 0)$, $H(-3, 4)$
13. $N(5, 2)$, $K(-2, 8)$
14. $A(-4, -4)$, $W(-2, 2)$

For Exercises 15–18, refer to the figure at the right.



15. Name the vertex of $\angle 6$.
16. Name the sides of $\angle 4$.
17. Write another name for $\angle 7$.
18. Write another name for $\angle ADE$.
19. **ALGEBRA** The measures of two supplementary angles are $4r + 7$ and $r - 2$. Find the measures of the angles.
20. Two angles are complementary. One angle measures 26 degrees more than the other. Find the measures of the angles.

Find the perimeter of each polygon.

21. triangle *PQR* with vertices $P(-6, -3)$, $Q(1, -1)$, and $R(1, -5)$

Sep 18-10:59 AM